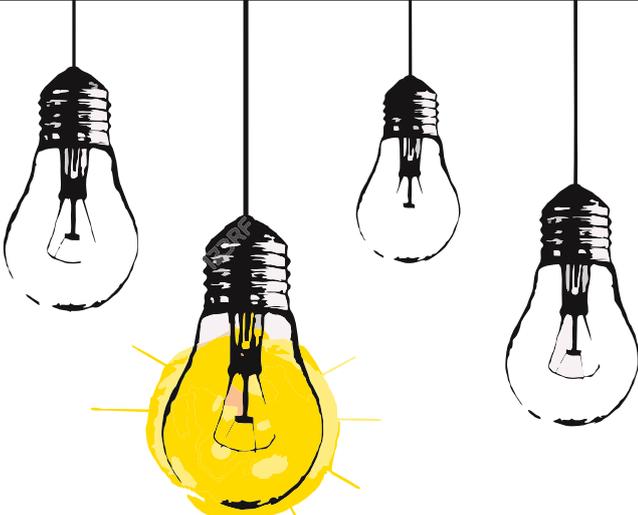




# Wake Up India!

## It's Time To Invest In R&D





## Preface

India has known to be a land of innovation for a very long time not only in science & technology but also how to live a holistic life through spirituality and yoga.

We are known to be frugal innovators and have created many examples the world can look upto in the form of using a washing machine to make lassi (popular yogurt based shake) or how used rubber tyres are being used to make it a round table fixed with a glass top.

The beauty is while we have jugaad innovators to solve everyday problems with minimum of resources, we also have our scientists and tech community which have been working on high end research areas around life sciences, robotics and automation, space science to name a few.

As we all are aware, research is the foundation to building a product, company or even a nation as demonstrated by Israel. India needs to continue to innovate to solve the unique problems faced by her be it in terms of optimally utilising its natural resources for its vast population, providing opportunities to its youth population or dealing with local issues such as farm productivity etc.

R&D is the key to elevating quality of life, solving ecological problems and making our life more meaningful.

R&D incentives is a globally acceptable practice for getting companies and startups to invest in technology development and India has been following this mechanism to incentivise Indian and global companies operating out of India.

This white paper has been conceptualised to identify R&D incentives system bottlenecks, likely impact of phasing out of R&D incentives, how can DSIR (Dept. of Scientific & Industrial Research, the nodal agency for R&D certification and financial benefits) be strengthened and feedback from companies of what they need to increase their R&D investments to make India globally competitive and technically independent.

We are submitting this white paper to Principal Scientific Advisor (PSA) office which is responsible for S&T policy making and improving R&D infrastructure in India and hope that our suggestions will be utilised for policy making and strengthening R&D ecosystem in India including R&D investments and incentives leading to a more prosperous India, the India of tomorrow we dream of.



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## Summary

Scinnovation Consultants Pvt. Ltd. (henceforth SCPL) would like to thank Principal Scientific Advisor, Prof. Vijay Raghavan and his office for providing the platform to share the industry view on R&D incentives in India which has been off the radar of the Govt. of India but is extremely crucial to the success of making India a technology powerhouse and the hotbed of innovation and startups.

The recent announcement by the Honourable Finance Minister on 20th Sep. 2019 has caused further damage to companies focused on innovation and trying to avail R&D incentives by clubbing R&D tax deduction provided u/s 35 (2AB) with other forms of incentives which is not permissible for companies availing lower corporate tax rate of 22% plus surcharge under the new guidelines.

This combined with the sunset clause for section 35 (2AB) leaves no incentives for companies involved in research to claim any kind of incentives for taking risks for new product or technology development.

The lack of incentives combined with the inept functioning of Department of Scientific & Industrial Research (DSIR) is a wake up call for India which is also the title of our report, 'Wake up India, its time to invest in R&D'.

This is in stark contrast to European Union (EU) region where even in the middle of deep recession back in 2016, they chose to consciously increase the budgets available for innovation and extended the Horizon program which is the largest innovation & research program beyond 2020 with budgets of nearly 80 billion Euro.

Along with R&D tax deduction currently available, the companies need funding opportunities which is largely missing beyond healthcare sector and the key for SMEs who are looking at staying relevant by upgrading their technology and go global.





**Overall, there should be a R&D regulator focused on developing research infrastructure, address bottlenecks and create collaborative environment.**

**We hope this report leads to action which is the need of the hour else we will continue to depend on import of technology and not do justice to the millions of innovators who want to live the dream of making India the next global superpower.**

**We would like to thank our customers, advisors, global partners and our team for making this report possible in a short span of 25 days.**

**Wake up India, its time to invest in R&D.**



# Report

## Overview

Research and Development (R&D) forms heart of any innovation. Many companies and institutes invest in R&D to come up with breakthrough solutions or products to address various problems in the society. Be it manufacturing, pharmaceutical industry, Information Technology or any startup in different field; almost each of them has their R&D division which focuses on continuous improvement and innovation.

With limited natural resources, climate change and growing population, it is need of the hour to be future ready and find sustainable solutions. This will require highly disruptive technology and hyper innovation which can be achieved only from intense research and development.

It is a well-known fact that R&D projects are not only time consuming but also capital intensive. Very large capital goes into research over the years or sometimes decades to come up with innovative solution.

Due to this capital intensive nature of R&D it is considered as cost centre for any industry and it does not directly contribute to the bottom line of the company.

Hence, many companies are averse to invest in R&D and try to leverage on existing market trends. However, in order to develop as a nation and bring economic growth, it is imperative that we invest in R&D and understand its significance.

India has been aiming to develop its agriculture, pharmaceutical and healthcare sector over the years. It has also implemented initiatives like 'Make in India' with the objective of job creation and skill enhancement. It has also jumped to 77th place among 190 countries in the World Bank's 2018 Ease of Doing Business Index. [1]

India is also encouraging local as well as global companies to invest in R&D by incentivizing them in terms of tax benefits. This has been motivating companies and institutes to focus on R&D to develop innovative products and solutions. However, these tax incentives have their own caveats and it needs to be addressed so that they can be leveraged effectively.



To boost industry interests and promote companies to invest in R&D, government of India provides various incentives including tax benefits. But, recently after the financial budget 2019-20, it came as a disappointment that tax deduction of 150% for R&D expenditure is scheduled to be wound down to 100% by end of FY 2019-20 i.e. 31st March 2020.

This came in at a time when India is shining bright on the World map with its Chandrayan mission which showcases intense research to reduce the cost for launch. India is also considered as optimal location by global companies for Research and Development.

Many MNCs have established their R&D facilities in India to leverage its competitive labor cost, highly talented and skilled manpower, market opportunity and government support.

The Government of India has plans to develop India as an innovation hub through its effective measures to enable environment for research and development in India. [2] In spite of this India's investment in R&D has remained stagnant at around 0.7% of GDP for over last two decades.

This is well below the major countries such as the US(20.8%), China(2.1%), Israel(4.3%) and Korea(4.2%). [3]

This affirms that it is necessary for India to invest more in R&D to cater to its growing economy and utilize the talent pool available in India. In order to motivate companies to focus on R&D, it is important to incentivize them more rather than phasing out the tax incentives. Let's take a look at the incentives that are provided by GOI for R&D.

**Current Incentives for R&D provided by Government of India can be summarized as below:**

- A weighted deduction of 150% is available to manufacturing companies on in-house R&D expenditure, including capital expenditures on scientific research related to the production of articles and products. This includes expenses on filing patent applications, performing clinical drug trials, and obtaining approvals from regulatory authorities. [4]
- A concessional tax rate of 10% (plus applicable surcharge and tax) on income earned by royalty in respect of patents developed and registered in India.
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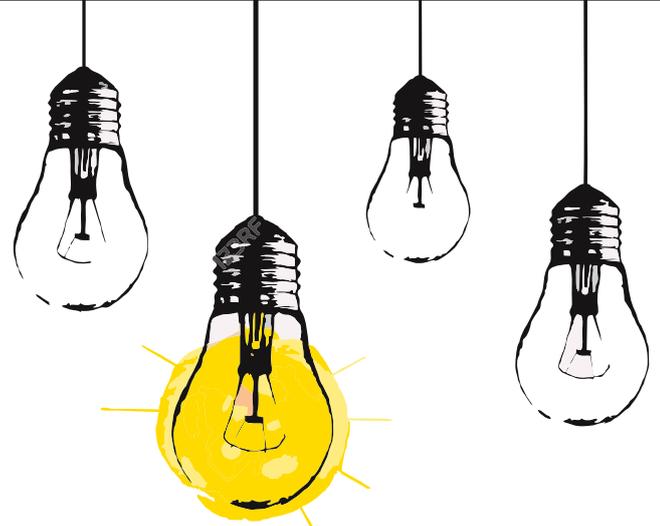


- Custom duty exemption to in-house unit of industries for capital equipment and consumables needed for R&D.
- Duty free import of specified goods for use in pharmaceutical and biotechnology sectors by importers registered with the Department of Scientific and Industrial Research (DSIR).
- GST concession for research institutions.
- A payment made to an approved research association undertaking research in the social sciences or in statistical research, or to an Indian company to be used by it for scientific research, is eligible for a deduction of 100% of the payment made. [5]
- Contributions made to any National Laboratory, approved scientific research associations, universities, and the Indian Institute of Technology are eligible for a weighted deduction of 150% of the contributions made up to 31 March 2021. Thereafter, the deduction will be restricted to 100% of the contribution. [6]

### Current Challenges for R&D in India

The above mentioned incentives do motivate the companies to invest in R&D, but there are many caveats before a company can avail to them.

- ⊗ **Dedicated R&D Area:** A weighted deduction of 150% of expenditure is available in respect of expenditure incurred on scientific research in an in-house R&D facility approved by the prescribed authority for companies engaged in specified businesses and in research associations, universities, etc. Globally R&D incentives are provided on R&D projects but in India one needs to get the R&D set up certified to start availing R&D incentives which takes minimum of one year (recognition and approval). It is also restricted to the space dedicated to R&D which is redundant in today's time. It requires that company has minimum 1000 sq. ft. of area dedicated to R&D. There are lots of practical issues since R&D activities are carried on the production floor and segregating the R&D activities from other commercial activities is not viable.



- ⊗ **Limited scope:** Only limited companies (private and public ltd. cos.) are eligible so companies with partnership, proprietorship and even LLP are not eligible making the scheme limited in its impact. Also there is a three year incorporation clause because of which only established companies can claim benefits leaving start ups and young companies outside the ambit of the scheme. Again if a non limited company changes to a limited company it has to wait for three years before it becomes eligible although they are an existing legal entity. Retrospective benefit is offered only for capital expenditure to the tune of more than one crore for previous financial year and no other retrospective benefit is allowed. There is an exclusion list which includes cosmetics which is a mainstream product consumed by today's modern society.
- ⊗ **Lack of integration:** Mixed use of equipments used for non R&D activities are not permitted which is an issue in many situations where the equipment is expensive or the company has very limited use for the equipment not justifying the investment to be made.
- ⊗ **No Third Party engagement:** Third party development using outside experts cannot be claimed as expenses whereby the expertise may not be available within the company. Even use of consultants or experts for technology development including patent drafting and filing cannot be claimed as expenses. Collaborative research with other companies including start ups cannot be claimed making research restrictive in nature. Part time R&D manpower is also not permitted.

Overall the scheme is outdated focused only on internal research in the four walls of the company not taking in account the fact that the world has moved to collaborative research which makes the scheme very restrictive in nature.



# Feedback Summary

Based on the survey conducted, it was realised that around 70% of the respondents have a reasonable experience working with DSIR in terms of getting their R&D recognition and other activities. In spite of good experience working with DSIR, they feel that the time taken for approval or DSIR recognition was too much. Almost all the respondents feel that, getting hold of the DSIR management for required discussions and interview is a challenge.

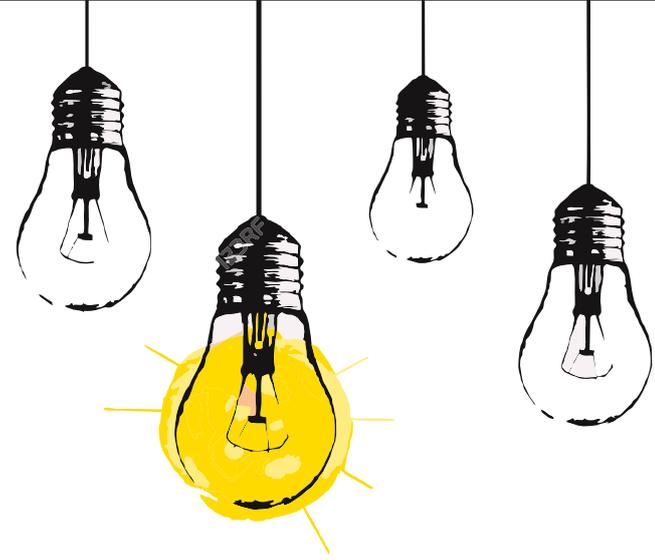
When asked about improvements required in DSIR process and R&D incentives; almost all the participants feel that the certification process should be time bound and should not take forever to grant. 66% are of the view that availing the DSIR scheme benefits should be focused in R&D projects as against the R&D space in current scenario.

On the proposed sunset clause for R&D tax incentives, all of the participants feel it is damage to the R&D as a whole. They voiced it out mentioning that this clause can lead to reduced R&D investments in India and also it can push out investment out of India by relying on other countries for technology and know-how. This will definitely have a negative impact on the R&D investment in India.

On the improvement of existing R&D schemes, there is unison in terms of simplifying the process and making it accessible for every small or large company. Almost 66% feel that the R&D ecosystem in India should provide world class R&D infrastructure which can be utilised by start-ups and academia. Half of them also propose that tax breaks should be provided to new products and should encourage failure which can lead to success.

## Stakeholders Feedback for R&D incentives

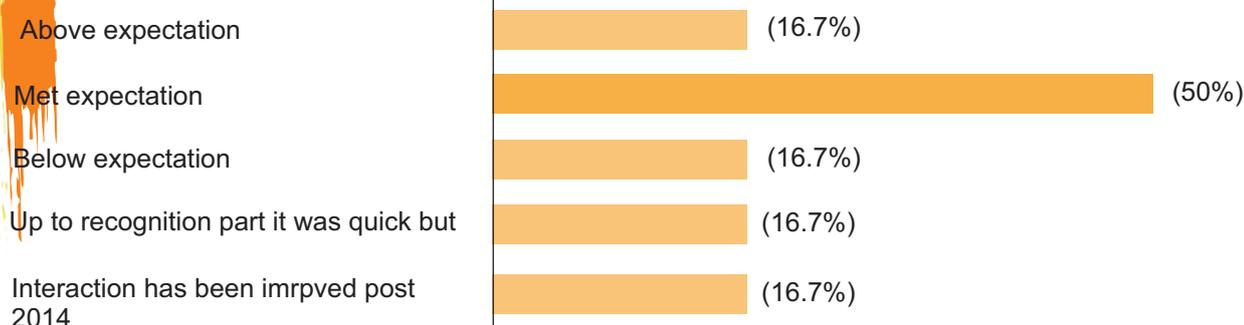
To understand the overall concerns, reactions and suggestions of the stakeholders a survey was conducted by Scinnovation Consultants Pvt. Ltd. (SCPL). The objective was to get feedback from industry experts, technocrats, researchers and bureaucrats on the recent announcement of phasing out R&D incentives from current 150% to 100% by 2020.



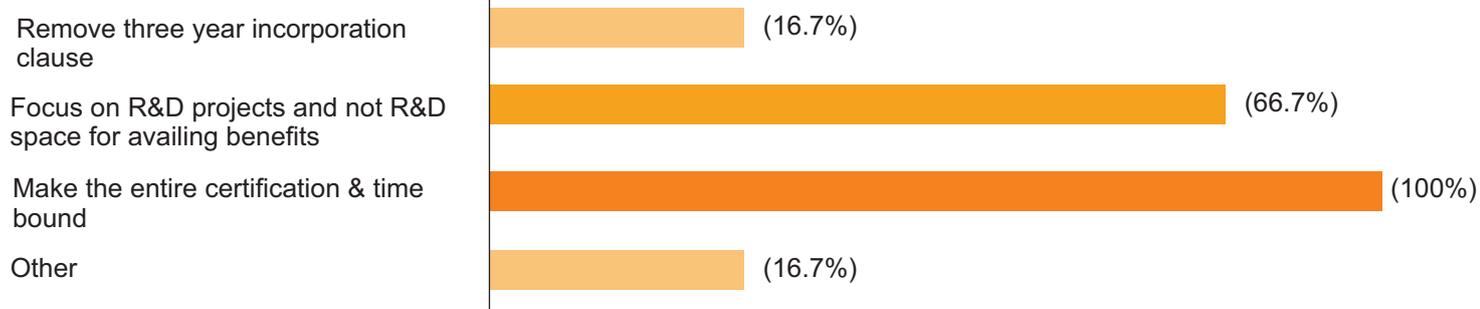
## At a Glance

**Please Note :** In some of the questions the sum of the responses add up to more than 100% since they were multiple choice questions

### ⊗ What has been your experience been of working with DSIR?



### ⊗ What can be done to make the DSIR scheme more accessible and popular?

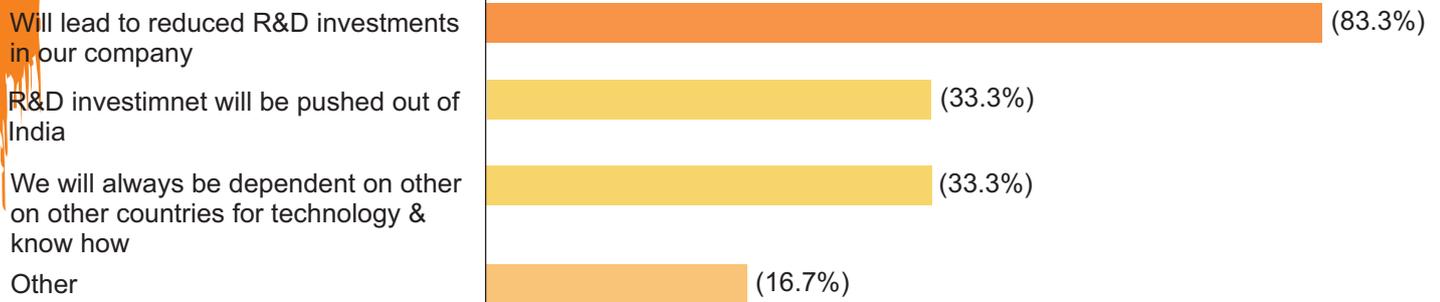


### ⊗ What was the most challenging part of the entire DSIR process





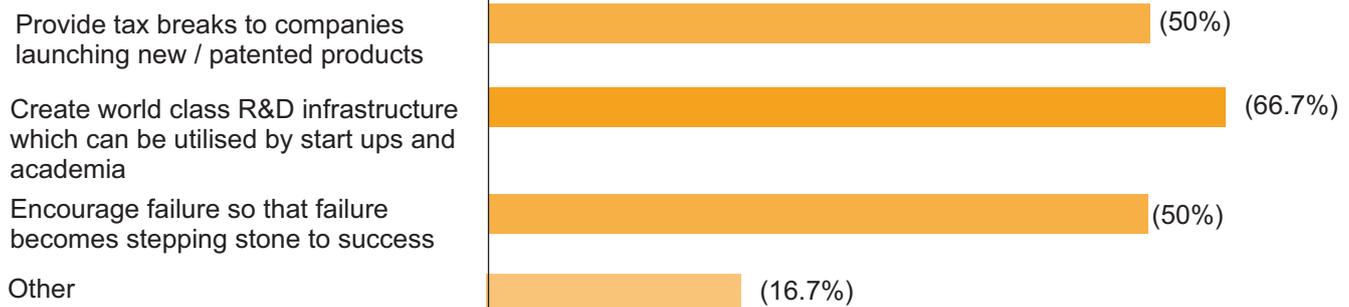
## ⊗ How will the proposed sunset clause to bring down Income Tax benefits to 100% from 1st April 2020 affect your plans?



## ⊗ How can we improve R&D incentives scheme in India?

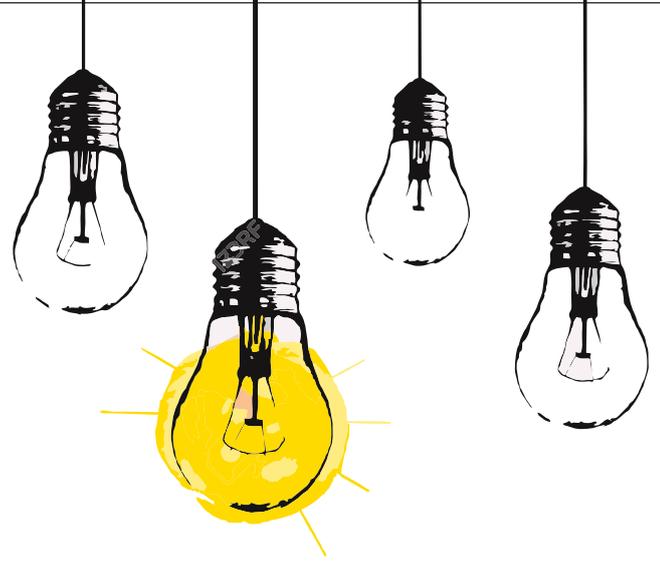


## ⊗ What can be done to improve India's R&D ecosystem in India?





# Research Methodology

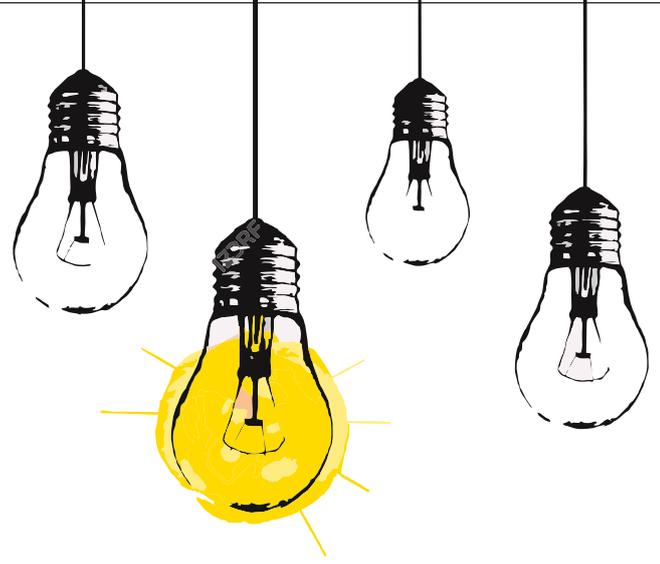


The research methodology aims to understand the reaction of various stakeholders from various sections of the society.

We applied following methods to gather information and feedback from innovators, industry and institutional researchers & consultants.

1. Personal Interviews
2. Telephonic Interviews
3. Email Surveys

# Recommendations



1. Focus should be on R&D capabilities on the company and not on the dedicated space available for doing R&D in the company. To stay in the race of fast paced development, it is worthwhile to consider that companies does not have time and money to invest in dedicated space for R&D. Space crunch has led many companies to run their work from small rented spaces which saves cost. Also, acquiring suitable space, setting up the R&D facility and undergoing different approvals for the space takes lot of time which can hinder the timeline for the R&D project and hamper the first mover advantage for the companies.
2. R&D certification process should be simplified and time bound ensuring that companies focus on R&D and not waste undue time availing the certificate which takes more than one year currently for availing DSIR recognition and approval.
3. Make sure the DSIR online system works. For more than 3 years now, the online filing system on DSIR website, [www.dsir.gov.in](http://www.dsir.gov.in) is non-functional which is appalling and unacceptable forcing companies to send hard copies of the application to DSIR causing anxiety whether the documents have been received and in secure condition.
4. Invest in R&D to Make in India should be the mantra for which incentives should be available else manufacturing sector in India will suffer if Design & Development is not given consideration.
5. Treat R&D incentives differently from other forms of incentives so that companies can claim the same even if they are availing lower corporate tax rate of 22% which was announced on 20th Sep. 2019 by Honorable Finance Minister.
6. Make R&D incentives permanent as is the global practice. R&D incentives scheme typically are either permanent or long term providing clarity to companies looking at making R&D investments or setting up new R&D facility in India



7. Encourage collaborative research and let the same be claimed as R&D expenditure. Today's business demands one collaborates with other research / academic institutions and Govt. has taken step in that direction by making CSR funding available for Govt. funded research institutes & incubators in the latest announcement by Finance Minister on 20th Sep. 2019.
8. R&D incentives should be provided to any LLP, Private Ltd. or Public partnership. India has become a start-up hub. Many university graduates are starting their own venture. As a naïve in the industry they initially start as a LLP or proprietorship. But they invest heavily in R&D as they focus on bringing innovative ideas to the market. For such companies, capital is very limited and it hampers the amount invested in R&D. If incentives are not granted to such companies then India might lose high talent and skills which can boost economic growth, create jobs and develop people's life.
9. The culmination of R&D is launch of new products which should be incentivised through lower GST rate. This is will encourage companies to take more risk and launch new products spurring growth as also solving India's technological problems.
10. There is no access to institutional funding & there is a need to encourage small and medium enterprises to invest in innovation by providing them with low cost capital with long payback period. Such patient capital will help these organisations grow and scale to be unicorns.



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